

Remarks

Claims 1-29 were presented for prosecution. Claims 24-29 were rejected under 35 USC 112, second paragraph, as being indefinite. Applicants have herein amended claim 24 to address this issue. Claims 1-3, 5, 7-9, 12-16, 19-21 and 23-28 stand rejected under 35 USC 102(b) as being allegedly anticipated by Cheong, US Patent 6,055,463. Claim 16 stands rejected under 35 USC 102(b) as being allegedly anticipated by Puel, US Patent 5,845,237. Claims 7, 8, 12, 24 and 25 stand rejected under 35 USC 102(b) as being allegedly anticipated by Good, US Publication 2004/0093107. Claims 1, 2, 7-9 and 16 are rejected under 35 USC 103(a) as being unpatentable over Himmelstein, US 4,320,463, in view of Meriam-Webster's Collegiate Dictionary. Claims 4, 6, 10, 11, 17, 18 and 29 are rejected under 35 USC 103(a) as being unpatentable over Cheong in view of Newmark, US Patent 6,631,305. Claim 22 is rejected under 35 USC 103(a) as being unpatentable over Cheong in view of Wang US Patent 6,789,031. Claims 1, 7 and 16 have also been amended. No new matter is believed added.

Applicants respectfully traverse the above-mentioned rejection for the following reasons. First, with regard to the 102(b) rejection of claims 1-3, 5, 7-9, 12-16, 19-21 and 23-28, Applicants respectfully submit that Cheong fails to teach numerous features of the claimed invention, as is required under 35 USC 102(b). Note that Applicants have amended claims 1, 7 16 and 24 to clarify that the operational database is historical.

Thus for example, claim 1 recites, *inter alia*, "providing a *historical* database of operational data gathered from previously processed workpieces, wherein the operational data is unrelated to the processing of the workpiece and wherein the operational data can be filtered into subgroups of operational data." Claims 7, 16 and 24 recited similar

features. The Office Action alleges that this feature of providing a database of previously processed workpieces is taught in the Abstract. Applicants traverse this finding, as it is clear that Cheong fails to teach a historical database of ... previously processed workpieces. Instead, Cheong "improves the efficiency of a test process" ... "by using test data of the final test," (See, column 1, lines 65 to column 2, line 1) captured in real time.

"The host computer 14 comprises a memory containing database structures formulated from the test data transmitted from the testers." (See, column 4, lines 13-15.) "Test data ... are transmitted to and then stored in the host computer 14 in real time." (See, column 4, lines 13-15.) Accordingly, Cheong does not teach "providing a *historical* database of operational data gathered from *previously processed workpieces*." In other words, the database of Cheong only uses test data of the current test process to improve efficiency of the current process, and does not use historical data, unrelated to the current processing operation. Accordingly, because Cheong fails to teach or suggest, *inter alia*, using a historical database, Applicants submit that the aforementioned 102(b) rejection should be withdrawn.

With regard to the rejection of claim 16 under 35 USC 102(b) as being allegedly anticipated by Puel, Applicants submit Puel fails to teach numerous features of the invention. In particular, Puel teaches a prediction methodology, e.g., to predict values of diverse physical quantities which enter into the running of manufacturing processes. The Office Action relies on claims 1 and 2 of Puel, which do not track Applicants' claim 16. For example, the Office action equates filtering the historical database (claim 16) with distributing data into subgroups (Puel); calculating evaluation criteria for a selected

subgroup (claim 16) with a set of steps for distributing (Puel); and determining if the evaluation criteria meet a set of predetermined requirements (claim 16) with evaluating the distribution (Puel). Clearly, Puel does not teach, *inter alia*, calculating evaluation criteria for a selected subgroup, since Puel's distribution includes all subgroups from the initial data set. Accordingly, Applicants submit that the aforementioned 102(b) rejection should be withdrawn.

With regard to the rejection of claims 7, 8, 12, 24 and 25 under 35 USC 102(b), Applicants submit that Good fails to teach numerous features of the claimed invention. For example, claim 7 recites a "historical database of operational data gathered from previously performed manufacturing processes." The Office Action alleges that this feature is taught on page 2, paragraph 23. However, a careful reading of that paragraph reveals that database server 100 stores data related to the status of entities in the current process flow, pre and post process measurement data, state data and priority data. There is simply no teaching or suggestion of a historical database of previously performed manufacturing operations.

Moreover, Good fails to teach "a filtering system for filtering the historical database into a data subset." The Office Action alleges this feature is taught in claim 1, however, claim 1 makes no mention of a filtering system for filtering historical data. Accordingly, Applicants submit that the aforementioned 102(b) rejection should be withdrawn.

Applicants also traverse the 35 USC 103(a) rejections to claims 1, 2, 7-9 and 16. To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the

knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. In the present case, the cited combination of references fails to teach or suggest all of the claim limitations.

Similar to the arguments made above, Himmelstein fails to teach or suggest, *inter alia*, a historical database. As explicitly stated in the first sentence of the Abstract, Himmelstein teaches "product control system wherein statistical determinations are continuously made on the basis of *current* manufacturing process data." There is simply no suggestion of using data from a *historical* database of previously performed manufacturing processes. Accordingly, Applicants submit that the aforementioned 103(a) rejection should be withdrawn.

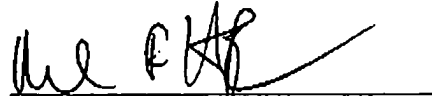
The remaining 103(a) rejections rely on Cheong as the primary reference. Applicants submit that these rejections are defective for the reasons stated above. Similarly, the dependent claims not discussed above are believed allowable for the reasons discussed above, as well as for their own additional features.

Accordingly, Applicants respectively submit that all claims are in condition for allowance. If the Examiner believes that anything further is necessary to place the application in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,

Dated:

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